

## ENGINEERING EVALUATION - DRAFT

Facility ID No. 21363  
BioMarin Pharmaceutical Inc.  
770 Lindero Street, San Rafael, CA 94901  
Application No. 29509

### Background

BioMarin Pharmaceutical Inc. is applying for an Authority to Construct/Permit to Operate for the following equipment:

#### **S-7      Wipe Cleaning Operation Permit Condition No. 26857**

S-7 has been operational since September 11, 2018 and the facility was never issued a Notice of Violation. The facility contains multiple buildings with a variety of street addresses. S-7 will be located within the facility boundary at 791 Lincoln Ave., San Rafael, CA 94901.

S-7 uses 70% isopropanol in the form of spray bottles, presoaked wipes, and squeeze bottles for wipe cleaning and disinfecting operations of research laboratories.

This evaluation report will discuss compliance of the proposed project with all applicable rules and regulations.

### Emissions

Isopropanol is a Volatile Organic Compound (VOC) that is also considered a Precursor Organic Compound (POC). Table 1 calculates expected isopropanol emissions from S-7 and assumes 100% of the isopropanol is emitted.

**Table 1:** Calculated VOC Emissions from S-7

Annual Solvent Usage	(gal)	560
Isopropanol Concentration	(vol %)	70
Isopropanol Density	(lb/gal)	6.56
<b>Isopropanol Emissions<sup>1</sup></b>	<b>(lb/yr)</b>	<b>2580 (rounded)</b>
	<b>(lb/day)</b>	<b>9.9</b>
	<b>(lb/hr)</b>	<b>1.1</b>
	<b>(ton/yr)</b>	<b>1.290 (rounded)</b>

1 Based on 260 days/year and 9 hours/day

### **Cumulative Increase**

Table 2 summarizes the cumulative increase in criteria pollutant emissions that will result from this application. It is assumed that Non-Precursor Organic Compound (NPOC) emissions are equivalent to POC emissions, even though isopropanol is not an NPOC. This assumption allows the facility flexibility in the solvent used for wipe cleaning operations.

**Table 2.** Cumulative Emissions Increase, Post 4/5/91

<b>Pollutant</b>	<b>Existing Emissions Post 4/5/91 (tons/yr)</b>	<b>Application Emissions (tons/yr)</b>	<b>Cumulative Emissions (tons/yr)</b>
NO <sub>x</sub>	0.417	0.000	0.417
POC	0.024	1.290	1.314
NPOC	0.000	1.290	1.290
CO	0.091	0.000	0.091
PM <sub>10</sub>	0.005	0.000	0.005
PM <sub>2.5</sub>	0.000	0.000	0.000
SO <sub>2</sub>	0.000	0.000	0.000

### **Health Risk Assessment (HRA)**

Regulation 2 Rule 5 specifies an acute trigger level of 7.1 lb/hr and a chronic trigger level of 270,000 lb/year for isopropanol. Table 1 indicates that the calculated emissions of isopropanol from S-7 do not exceed the trigger levels of Regulation 2 Rule 5. Therefore, no HRA is required for this source.

### **Best Available Control Technology (BACT)**

In accordance with Regulation 2-2-301, BACT is triggered for any new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, or PM<sub>10</sub>.

BACT for this source is presented in the current BAAQMD BACT/TBACT Workbook in Section 6: Wipe Cleaning Document #179B.1 Revision 2 dated 02/04/1993. As POC emissions are not expected to exceed 10 lb/day, BACT is not triggered

### **Offsets**

Since the facility permitted levels are below the offset triggers levels specified in Regulation 2-2, offsets are not required.

## **Statement of Compliance**

The owner/operator is expected to comply with all applicable requirements. Key requirements are listed below:

### **District Rules**

Regulation 8-1-320 (Surface Preparation; Clean-up; Coating, Ink, Paint Removal)

Regulation 8-1-321 (Closed Containers)

Regulation 8-4-116 (Limited Exemption, Specific Surface Preparation and Cleaning Operations)

- S-7 is exempt from the standards of Section 8-4-313 (Surface Preparation Standards) as S-7 is associated with research and development operations.

Regulation 8-4-302 (Solvents and Surface Coating Requirements)

Regulation 8-16-501 (Solvent Records)

### **California Environmental Quality Act (CEQA)**

This project is ministerial under the District Regulation 2-1-311 (Permit Handbook Chapter 6.3) and is therefore not subject to CEQA review.

### **New Source Performance Standards (NSPS)**

NSPS is not applicable to S-7.

### **National Emissions Standards for Hazardous Air Pollutants (NESHAP)**

NESHAPS is not applicable to S-7.

### **Prevention of Significant Deterioration (PSD)**

This application is not part of a PSD project as defined in Regulation 2-2.

### **School Notification (Regulation 2-1-412)**

This equipment is located within 1,000 of the nearest school (listed below) and therefore is subject to the public notification requirements of Regulation 2-1-412. A public notice was prepared and sent to the parents or guardians of children enrolled in any school within one-quarter mile of the source and to each address within a radius of 1,000 feet of the source.

James B. Davidson Middle School  
280 Woodland Ave.  
San Rafael, CA 94901

## **Permit Conditions**

### **Permit Condition #26857 for S-7**

1. The owner/operator of S-7 shall not exceed the following usage limits during any consecutive twelve-month period:

70% Isopropanol      560 Gallons

(Basis: Cumulative Increase)

2. The owner/operator may use an alternate solvent(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-7 do not exceed 2,580 pounds in any consecutive twelve-month period;
  - b. Total NPOC emissions from S-7 do not exceed 2,580 pounds in any consecutive twelve-month period; and
  - c. The use of these materials does not increase toxic emissions above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

(Basis: Cumulative Increase; Toxics)

3. To determine compliance with the above parts, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities of each type of solvent used at this source on a monthly basis.
  - b. If a material other than those specified in Part 1 is used, POC/NPOC and toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 2, on a monthly basis;
  - c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelvemonth period.

All records shall be retained on-site for two years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations.

(Basis: Cumulative Increase; Toxics)

***End of Conditions***

## **Recommendation**

The District has reviewed the material contained in the permit application for the proposed project and has made a preliminary determination that the project is expected to comply with all applicable requirements of District, state, and federal air quality-related regulations. The preliminary recommendation is to issue a Permit to Operate for the equipment listed below. However, the proposed sources will be located within 1,000 feet of at least one school, which triggers the public notification requirements of Regulation 2-1-412. After the comments are received and reviewed, the District will make a final determination on the permit.

I recommend that the District initiate a public notice and consider any comments received prior to taking any final action on issuance of a Permit to Operate for the following source:

**S-7      Wipe Cleaning Operation**  
**Permit Condition No. 26857**

Prepared by: \_\_\_\_\_  
Mark Gage, Air Quality Engineer I